## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 77-142

NPDES PERMIT NO. CA0005240

WASTE DISCHARGE REQUIREMENTS FOR

CALIFORNIA AND HAWAIIAN SUGAR COMPANY CROCKETT. CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the Board) finds that:

- 1. This Board on November 19, 1974, adopted Order No. 74-145 prescribing waste discharge requirements and compliance time schedules for California and Hawaiian Sugar Company (hereinafter discharger) to attain by July 1, 1977, Best Practical Control Technology Currently Available (BPCTCA) for effluent discharged from the refining of raw cane sugar into crystalline cane sugar products.
- 2. The discharger has filed a Report of Waste Discharge (NPDES Form C) dated December 29, 1976, reflecting its current and proposed status in meeting BPCTCA. The discharger is building a biological treatment plant and revising discharges to meet BPCTCA. The biological treatment facility will also treat Crockett-Valona Sanitary District domestic and industrial wastes. This Board intends to adopt joint waste discharge requirements for the discharger and district at a later date.
- 3. The discharger is discharging industrial wastes containing pollutants into Carquinez Strait and an unnamed tidal stream tributary thereto, both waters of the United States.

## Waste OOL

(Formerly Wastes 001, 002, 003, 004 and part of Waste 006 of Order 74-145) is 20 to 30 mgd of once-through cooling water used in barometric condensers on vacuum pans and evaporators and in stream turbine heat exchangers. It also includes boiler blowdown water and is discharged through a diffuser at the bottom of Carquinez Strait approximately 200 feet offshore at a depth of 47 feet.

### Waste 002

(Includes former Wastes 005 and 014 and part of former Waste 007 of Order 74-145) is approximately 1.5 mgd of effluent from the biological treatment of sugar refinery process wastes. In late 1978, this will include effluent from the biological treatment of domestic wastes from the Crockett-Valona Sanitary District. The waste is discharged by submarine outfall and diffuser to Carquinez Strait 637 feet offshore at a depth of 46 feet directly under the Carquinez Bridge. Due to incomplete construction of the biological treatment plant this waste is currently discharged at three locations adjacent to the refinery.

### Waste 003

(Formerly Waste 006 of Order No. 74-145) is about 0.02 mgd of miscellaneous wastewaters from the boiler house including brine and rinse water from the zeolite softening units, backwash water from the deepbed filters, and pump gland sealing waters.

### Waste 004

(Formerly Waste 010 of Order No. 74-145) is about 100 gallons per day of water from the refinery railcar scale pit which accumulates from the rinsing of the exterior of railcars carrying bulk granulated sugar. This waste also includes some storm run-off from the refinery yard.

## Waste 005

(Part of former Waste 007 of Order No. 74-145) is about 100 gallons per day of wastewater from a steam cleaning rack. This waste also includes some stormwater from the refinery yard.

## Waste 006

(Part of former Waste 008 of Order No. 74-145) is about 100 gallons per day of water used to wash equipment and ground area at the refinery truck washing station. It also includes some stormwater.

## Waste 007

is about 100 gallons per day wastewater from the truck loading station and includes water from hydraulic operators, loading spout washing, scale pit drainage, and some storm run-off.

## Waste 008

is also principally stormwater from the refinery yard but includes a small quantity of water from the steam cleaning rack.

#### Waste 009

is the effluent from the oil separator on the drains from the raw sugar dock. These drains discharge primarily stormwater.

## Waste W

is approximately 30 tons (dry weight) per day of solid industrial wastes containing principally waste filter aid with some char dust, inorganic salts and a small quantity of organic matter and 4-5 tons (dry weight) per day of dewatered digested sludge from the biological treatment plant. This waste is discharged onto Land Disposal Site "L-1" on the ridge dividing the watershed of Canada del Cierbo from that of an unnamed tributary of Rodeo Creek.

- 4. The State Water Resources Control Board, on May 18, 1972, adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California, hereinafter called the Thermal Plan. The Thermal Plan contains water quality objectives for Carquinez Strait. On August 15, 1973, the discharger applied for exceptions to the Thermal Plan. After public hearings, the Board on February 18, 1975, adopted Resolution No. 75-5 granting the discharger exemptions to the Thermal Plan objectives 5.a(1)a and 5.A.(2) with the stipulation that the thermal wastes diffused at least 75 feet offshore with an initial dilution of at least 10:1. The State Water Resources Control Board agreed by their Resolution 75-72 on July 17, 1975. The U. S. Environmental Protection Agency's, Regional Administrator concurred by letter of September 2, 1975.
- 5. The Board, in April 1975, adopted a Water Quality Control Plan for the San Francisco Bay Basin.
- 6. The beneficial uses of Carquinez Strait and contiguous waters are:
  - a. Recreation
  - b. Fish migration and habitat
  - c. Habitat and resting for waterfowl and migratory birds
  - d. Industrial water supply
  - e. Esthetic enjoyment
  - f. Navigation
- 7. Effluent limitation and toxic effluent standards established pursuant to Sections 208(b), 301, 304, and 307 of the Federal Water Pollution Control Act and amendments thereto are applicable to the discharge.
- 8. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 9. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
- 10. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.
- 11. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from date of hearing provided the Regional Administrator, U. S. Environmental Protection Agency, has no objections.

IT IS HEREBY ORDERED that California and Hawaiian Sugar Company, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Water Pollution Control Act and regulations and guidelines adopted thereunder, shall comply with the following:

## A. Effluent Limitations

1. The discharge of an effluent containing constituents in excess of the following limits is prohibited:

Constituent and Waste	Units	30-Day Average	Maximum Daily
a. Total mass emission rate of BOD <sub>5</sub> contributed by Wastes	lbs/day	3,700	10,000
$001^*$ , $002$ , $004$ , $005$ , $006$ , and $007$	kg/đay	1,700	4,500
b. Total mass emission rate of Total Suspended Solids con-			
tributed by Waste 002, 003	lbs/day	770	2,300
004, 005, 006 and 007	kg/day	350	1,000
c. Oil and Grease: Waste 002	lbs/day	125	300
	kg/day	56	136
	mg/l	10	15
d. Waste 003	lbs/day	1.7	13
	kg/day	.77	5.9
	mg/l	10	15
e. Waste 005	lb/day	0.0083	13
	kg/day	.0038	5.9
	mg/l	10	15
f. Waste 006	lb/day	\$0083	13
	kg/day	.0038	5.9
	mg/l	10	15
g. Waste 007	lbs/day	.0083	13
	kg/day	.0038	5.9
	mg/l	10	1.5
h. Waste 008	lbs/day	.0083	1.3
	kg/day	.0038	5.9
	mg/l	10	15
i. Waste 009	lbs/day	.0083	13
	kg/day	<b>.</b> 0038	5.9
	mg/l	10	1.5

<sup>\*</sup>BOD $_5$  values for these wastes shall be based on the incremental increase of BOD $_5$  above that present in the intake water.

<sup>2.</sup> The wastes 001 and 002 shall not have a pH of less than 6.0 nor greater than 9.0.

- 3. The wastes 003, 004, 005, 006, 007, 008, and 009 shall not have a pH of less than 6.5 nor greater than 8.5.
- In any representative set of samples, waste 002 shall meet the following limit of quality.

### TOXICITY:

The survival of test fishes in 96-hour bioassays of the effluent shall be a 90 percentile value of not less than 50 percent survival. Exceptions to this limitations may be granted and revised toxicity requirements established by the Regional Board, pursuant to public hearing, if the discharger can demonstrate to the satisfaction of the Board that the following conditions are met:

- 1. The waste is discharged through a deepwater outfall which achieves rapid and high initial dilution and that the waste is rapidly rendered non-acutely toxic upon discharge, and
- 2. The toxicants in the waste are nonconservative constituents which are rapidly decayed in the receiving water; or the toxicants in the waste are conservative constituents for which water quality objectives have been established. The Regional Board will, in such cases, establish effluent mass emission rates for such Gonstituents.
- In any representative set of samples, waste 003 as discharged shall meet the following limit of quality:

## TOXICITY:

The survival of a test organism acceptable to this Regional Board in 96-hour bioassays of the effluents as discharged shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

6. The daily discharge rate is obtained from the following calculation for any calendar day:

Daily discharge rate = 
$$\frac{8.34}{N}$$
  $\frac{\Omega_{i}}{1}$   $\Omega_{i}$   $C_{i}$ 

in which N is the number of samples analyzed in any calendar day.  $Q_{\bf i}$  and  $C_{\bf i}$  are the flow rate (MGD) and the constituent concentration (mg/l) respectively, which are associated with each of the N grab samples which may be taken in any calendar day. If a composite sample is taken,  $C_{\bf i}$  is the concentration measured in the composite sample and  $Q_{\bf i}$  is the average flow rate occurring during the period over which samples are composited.

7. The 30-day average discharge rate or concentration shall be the arithmetic average of all the daily values calculated using the results of analyses of all samples collected during any 30 consecutive calendar day period. If fewer than four samples are collected and analyzed during any 30 consecutive calendar day period, compliance with the 30-day average limitation shall not be determined.

## B. Receiving Water Limitations

- 1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place.
  - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
  - b. Bottom deposits or aquatic growths;
  - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
  - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
- 2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
  - a. Dissolved oxygen 7.0 mg/l minimum. When natural factors cause lesser concentration(s) than that specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
  - b. pH Variation from natural ambient pH by more than 0.2 pH units.
  - c. Un-ionized 0.025 mg/l Annual Median Ammonia as N 0.4 mg/l Maximum
- 3. Elevated temperature waste discharges either individually or combined with other discharges shall not create a zone, defined by water temperatures of more than 1° above natural receiving water temperature, which exceeds 25 percent of the cross-sectional area of Carquinez Strait at any point.

- 4. No discharge shall cause a surface water temperature rise greater than 4 of above the natural temperature of the receiving waters at any time or place.
- 5. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

## C. Discharge Prohibitions

- 1. The discharge of Wastes 001 and 002 at any point in waters of the State at which the wastes do not receive an initial dilution of at least 10:1 is prohibited.
- 2. The maximum combined flow rate of Wastes 001 and 002 shall not exceed 40 mgd.

## D. Provisions

- 1. Neither the treatment nor the discharge of pollutants shall create a nuisance as defined in the California Water Code.
- 2. The discharge of Waste "W" shall not cause waste material to be in any position where it is, or can be carried from Land Disposal Site "L-1" and deposited into waters of the State.
- 3. Land Disposal Site "L-1" shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the disposal site. Adequate protection is defined as protection from a 24-hour rainfall event with an intensity such that the probability of recurrence of a 24-hour rainfall event with equal intensity is 1% (100-year, 24-hour rainfall event). The calculation of such a rainfall intensity shall be based on a statistical analysis of available precipitation records for the locations of Site "L-1".
- 4. The disposal of Group 1 wastes at Land Disposal Site "L-1" is prohibited.
- 5. The discharger shall comply with all sections of this Order not later than July 1, 1977.
- 6. Order No. 74-145 is rescinded effective December 31, 1977.

- 7. The discharger shall submit to the Executive Officer by February 15, 1978, an updated contingency plan for the continuous operation of facilities for the collection, treatment, and disposal of waste (to include the biological treatment plant) pursuant to Regional Board Resolution No. 74-10.
- 8. The discharger will comply with all items of the attached "Standard Provisions and Reporting Requirements," dated April 1977.
- 9. This Order expires on November 15, 1982, and the discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.
- 10. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by a letter, a copy of which shall be forwarded to this Board.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on November 15, 1977.

FRED H. DIERKER Executive Officer

Attachments:

Std. Prov. & Rept. Require. April 1977 Self-Monitoring Program Resolution No. 74-10

## CALIFORNIA REXIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

## SELF-MONITORING PROGRAM FOR

California and Hawaiian Sugar Company
Crockett, Contra Costa County

NPDES NO. CA 0005240

ORDER NO. 77-142

CONSISTS OF

PART A dated 8/77

AND

PART B ordered On November 15, 1977 effective immediately

## PART B

## I. DESCRIPTION OF SAMPLING STATIONS

Α.	INTAKE	
	Station	Description
	I-1	At any point in the salt water intake system prior to any usage of intake water.
В	EFFLUENT	
	Station	Description
	E-OOl	At any point in the Waste 001 outfall between the point of discharge and the point at which all waste tributary to that outfall is present.
	E-002	At any point in the Waste 002 outfall between the point of discharge and the point at which all waste tributary to that outfall is present.
	E-003	At any point in the Waste 003 outfall between the point of discharge and the point at which all waste tributary to that outfall is present.
	E-004	A point located at the discharge side of the pump which is periodically used to dewater the rail car weight pit. Samples should not be collected from the weight pit itself.
	E-005	At any point in the Waste 005 outfall between the point of discharge and the point at which all waste tributary to that outfall is present.
	E~006	At any point in the Waste 006 outfall between the point of discharge and the point at which all waste tributary to that outfall is present.
	E-007	At any point in the Waste 007 outfall between the point of discharge and the point at which all waste tributary to that outfall is present.
	E-008	At any point in the Waste 008 outfall between the point of discharge and the point at which all waste tributary to that outfall is present.
	E-009	At any point in the Waste 009 outfall between the point of discharge and the point at which all waste tributary to that outfall is present.

## C. RECEIVING WATERS

Station	Description
C-10	At a point in Carquinez Strait, located above the geometric center of the diffuser for Waste 001.
C-11	At a point in Carquinez Strait, located 100' westerly of geometric center of diffuser for Waste 001.
C-12	At a point in Carquinez Strait, located at 100° easterly of the geometric center of the diffuser for Waste 001.
C-13	At a point in Carquinez Strait, located 650° north of geometric center of diffuser for Waste 001.
C-1.4	At a point in Carquinez Strait, 95' south of geometric center of diffuser for Waste 001.
C-20	At a point in Carquinez Strait, located above the geometric center of the diffuser for Waste 002.
C-21	At a point in Carquinez Strait, located 100° westerly of the diffuser for Waste 002.
C-22	At a point in Carquinez Strait, located 100° easterly of the diffuser for Waste 002.
C-30	At a point in Carquinez Strait located at the edge of the wharf at the intersection of a line extended northerly from the outfall for Waste 003.
C-RE	At a point in Carquinez Strait, located at the edge of the wharf at its easterly end.
C-RW	At a point in Carquinez Strait, located at the edge of the wharf at its westerly end.

## E. LAND OBSERVATIONS

Station	Description
11	Located along the perimeter levee of Land Disposal
thru	Site "L-l", at equidistant intervals not to exceed
L- Fn	100 feet. (A sketch showing the locations of
	these stations will accompany each annual report
	described in Section F.4. of Part A.)

## II. SCHEDULE OF SAMPLING AND ANALYSIS

- A. The schedule of sampling, measurements and analysis shall be that given as Table I.
- B. Because the plant operates on a 10 days on and 4 days down 14 day cycle, samples should be collected in a well-ordered pattern, as defined below. Day 1 will be the first day of the 10 days on, with day 14 being the last day of the 4 days shutdown.

Sampling frequency	Day(s) to be sampled
D	1,2,3,4,5,6,7,8,9,10,11,12,13,14
5/W	1,2,3,4,5,6,7,8,9,10
2/W	2,4,7,9
V	2,7
2W	2
2/M	2
М	2
3M	2

## III. MODIFICATIONS OF PART "A" DATED AUGUST 1977

A. Exclusions: Paragraphs C.3., C.4., C.5.b., C.5.c., C.5.d.(1), C.5.d.(4), C.5.e., D.4., E.4., and F.3.g.(2).

### B. Modifications:

- 1. Paragraph D.1.a.: Replace "varying days selected at random" with "days coincident with composite sampling of effluent."
- 2. Paragraph D.3.b.: Replace "during the period" with "within l hour," and replace "during higher slack water period" with "within l hour of higher slack water."
- 3. Paragraph F.3.: Replace "The reports shall be comprised of the following:" with "Except as noted, the reports shall be comprised of the following:"
- 4. Paragraph F.3.c.: Replace "the report" with "the first report following the effective date of the Self-Monitoring Program, and each annual report (described in Paragraph F.4. below),".
- 5. Paragraph F.3.f: Add before subparagraphs (1) and (2), "The following lists shall be submitted with the first report following the effective date of the Self-Monitoring Program, and with each annual report."
- 6. Paragraph F.4.: Replace "both tabular and graphical" with "tabular."

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

- 1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 77-142.
- 2. Was ordered by the Executive Officer on November 15, 1977, effective immediately.
- 3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger. Revisions will be ordered by the Executive Officer.

FRED H. DIERKER Executive Officer

Attachment:

Table I

Date ordered November 15, 1977

Footnotes and Legend for Table I

# TABLE I SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	1-1		E~(	001	E-002		E-003		E-004		E-005		
TYPE OF SAMPLE	C-24	G	C-24	G	C-24	G	C-24	G	C-24	G	C-24	С	
Flow Rate (mgd)	D		a		D		W		<sub>M</sub> (2)		М		
BOD, 5-day, 20 <sup>0</sup> C, or COD (mg/I & kg/day)	2/W		2/W		W					И	4	М	
Chlorine Residual & Dosage (mg/l & kg/day)				yangan gangkapingan di di salimana				,					
Settleable Matter (ml/1—hr. & cu. ft./day)		W		2/W		W		W		- <del></del>			
Total Suspended Matter (mg/l & kg/day)					W		W			М		М	
Oil & Grease (1) (mg/l & kg/day)					W(1)		W(J)				~ <del></del>	M	
Coliform (Total or Fecal) (MPN/100 ml) per reg't													
Fish Toxicity, 96-hr. TL <sub>50</sub> % Survival in undiluted waste		anna' garlad bà quigh inneillea				М		δ		~### V/** ###### ##***			
Ammonia Nitrogen (mg/l & kg/day)										- Angelong Lympings of Services and			
Nitrate Nitrogen (mg/l & kg/day)			<u></u> .										
Nitrite Nitrogen (mg/l & kg/day)												**************************************	
Total Organic Nitrogen (mg/l & kg/day)		****						,				Moraph control of	and a branch make the force of the
Total Phosphate (mg/l & kg/day)													
Turbidity (Jackson Turbidity Units)												0	
pH (units)				5/W		Cont		Cont	.,,	M		М	
Dissolved Oxygen (mg/l and % Saturation)									*******				
Temperature (°C)				5/W					·*			*****	
Apparent Color (color units)									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			or o data de Aprilia de Arabino (no.	
Secchi Disc (inches)					ļ								
Sulfides (if DO<5.0 mg/l) Total & Dissolved (mg/l)				<u> </u>	<u> </u>	ļ							
Arsenic (mg/l & kg/day)				ļ									
Cadmium (mg/I & kg/day)					ļ								
Chromium, Total (mg/l & kg/day)				<u></u>	<u> </u>								
Copper (mg/l & kg/day)													
Cyanide (mg/l & kg/day)													
Silver (mg/l & kg/day										,		<u></u>	
Lead (mg/l & kg/day)		<u> </u>			<u></u>		<u></u>						

## TABLE I (continued) SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	I ma I		E-001		E-002		E-003		E-004		E~005		
TYPE OF SAMPLE				G		G		G		G		G	
Mercury (mg/I & kg/day)	distribution and a	g established for the second	eremente de describico	gir er lands skurenen ut der skriv	and the state of the	***************************************	America I Mana (Albania)		CONTROL OF CONCRETENCE	очновин-можетическей:	***************************************	CONTRACTOR (SOURCE)	
Nickel (mg/l & kg/day)		ann farhar tanamahan	***************************************						maner (may or personal submanus).				
Zinc (mg/l & kg/day)				************								<del> </del>	
PHEHOLIC COMPOUNDS (mg/l & kg/day)		re, no y arran an anagen despute				**********			B. ALMO 2-71 4232				1
All Applicable Standard Observations		1-a-1-17-1-a-1-1-1-1-1-1-1-1-1-1-1-1-1-1	***************************************			М		М		М		M	<u> </u>
Bottom Sediment Analyses and Observations		t e d'esquier sur la l'Address acces											
Total Identifiable Chlorinated Hydrocarbons (mg/l & kg/day)			***************		amuerane februier un	meralelander et mellent va 4 finansis			~**************************************				
Un-ionized Ammonium Hydroxide (mg/l)					***************************************	ATTENDED & & A. S.		~					
A Parket and the second of the													
						Y	e aprilie e e e e e e e e e e e e e e e e e e	-	and the second s				
The state of the s					***************************************	****	L						

# TABLE I SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	Е-00€	)	E-007		E-008		E-009		610 12 13,14	21,22	C-3	C-RE C-RW	8 7
TYPE OF SAMPLE	C-24	G	C-24	G	C-24	G	C-24	G	G	G	G	G	vesamentarines
Flow Rate (mgd)	м	77.41.41.41.41.41.41.41.41.41.41.41.41.41.	M		Q <sup>(4)</sup>		Ω <sup>(4)</sup>						major brofingajo
BOD, 5-day, 20 <sup>0</sup> C, or COD (mg/l & kg/day)		M		М									
Chlorine Residual & Dosage (mg/l & kg/day)													
Settleable Matter (ml/1-hr. & cu. ft./day)													
Total Suspended Matter (mg/l & kg/day)		М		М									
Oil & Grease (mg/l & kg/day)		М		М		Q <sup>(4)</sup>		Ω <sup>(4)</sup>					
Coliform (Total or Fecal) (MPN/100 ml) per req't													
Fish Toxicity, 96-hr. TL <sub>SO</sub> % Survival in undiluted waste													
Ammonia Nitrogen (mg/l & kg/day)												4.000.000	~~~~
Nitrate Nitrogen (mg/i <sub>.</sub> & kg/day)		. —											
Nitrite Nitrogen (mg/l & kg/day)													******
Total Organic Nitrogen (mg/l & kg/day)												***************************************	TO TO PATRICIA (TO MAIL)
Total Phosphate (mg/l & kg/day)													
Turbidity (Jackson Turbidity Units)										angin da pagasal anna da paga			
pH (units)		M		М	<u> </u>	Ω <sup>(4)</sup>		Ω <sup>(4)</sup>	М	M	2/M	М	
Dissolved Oxygen (mg/l and % Saturation)				****					М	М	М	М	
Temperature (°C)									2/M	М	M	М	
Apparent Color (color units)				~~~~~~~		addition of dealbooks to Bendelsonie							
Secchi Disc (inches)					<u> </u>								
Sulfides (if DO < 5.0 mg/l) Total & Dissolved (mg/l)	***************************************												
Arsenic (mg/l & kg/day)						,							
Cadmium (mg/I & kg/day)													
Chromium, Total (mg/l & kg/day)													
Copper (mg/I & kg/day)													
Cyanide (mg/l & kg/day)													
Silver (mg/l & kg/day						<u> </u>							
Lead (mg/l & kg/day)													

# TABLE I (continued) SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	E~006		E-007		E-008		E-009		Clo <sub>1</sub> 2	C20 21,22	20   C-3 1,2 <b>2</b>		L
TYPE OF SAMPLE		G		G		G		G	LJ <sub>e</sub> L <sup>e</sup>	G	G	G	0
Mercury (mg/l & kg/day)	-	**************************************	Programme and the	AMERICAN SAME AND SAME	AND SECURITY SALE SECURITY	(4-1-4-20-20-4-	r (who we'll scance	morrinus	OF DELVEROCACE.			AND INVESTMENT CONTRACT	*****
Nickel (mg/l & kg/day)								<u> </u>					
Zinc (mg/l & kg/day)					emplepage the entropy of the entropy								
PHENOLIC COMPOUNDS (mg/l & kg/day)					****								
All Applicable Standard Observations		М		M		Ω <sup>(4)</sup>	eringamben Residebn ernas stadus	Ω (4)	5/W	М	М	5/W	W
Bottom Sediment Analyses and Observations											**************		
Total Identifiable Chlorinated Hydrocarbons (mg/l & kg/day)													
Un-ionized NH <sub>4</sub> OH						and an article process of the second	***************************************		М	2/M	М	M	
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		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					······································						Citiza entre una richerato de se
			indrani da sandan e arr daren			verige of pipe, an compagn							

## LEGEND FOR TABLE

## TYPES OF SAMPLES

G = grab sample
C-24 = composite sample - 24-hour
O = observation
Cont = continuous

## FREQUENCY OF SAMPLING

E= each occurrence
D = once each day
W = once each week
M = once each month
5/W = 5 days per week
2/W = 2 days per week
2/M = 2 days per month
Q = every 3 months

### TYPES OF STATIONS

I = intake and/or water supply stations

E = waste effluent stations

C = receiving water stations

L = basin and/or pond levee stations

### FOOTNOTES

- (1) Separately collect and analyze at 8 hour intervals three grab samples for oil and grease on each sampling day. Report the arithmetic average of these as the value for that day, and use it to calculate the kg/day discharge rate. Alternately, the samples may be combined for analysis if their volume is proportional to flow rate at time collected within +5% and if the samples and their containers are handled in accordance with the procedures of Standard Methods for oil and grease samples. This means that glass container used for sample collection or mixing shall be throughly rinsed with solvent as soon as possible after use, and the solvent rinsing shall be added to the composite wastewater sample for extraction and analysis.
- (2) Monthly Estimate
- (3) Receiving water standard observations are excused if effluent not turbid, discolored, oily, and no floating matter.
- (4) During wet weather period, take sample during first daylight storm of each calendar quarter.